## IN THE CLAIMS

Please amend the claims as follows:

1. (Original) A device for scaling a source image to a destination image, comprising:

an interpolation filter, wherein the interpolation filter is to upscale the source image to an intermediate image, wherein the intermediate image has a size equal to a size of the destination image adjusted by a scale factor; and

a first average filter to downscale the intermediate image to the destination image.

2. (Original) The device of claim 1, wherein the first average filter further is to average horizontally the intermediate image on a two-by-two pixel basis.

3. (Currently Amended) [[The]] A device ~~of claim 1~~ for scaling a source image to a destination image, comprising:

an interpolation filter, wherein the interpolation filter is to upscale the source image to an intermediate image, wherein the intermediate image has a size equal to a size of the destination image adjusted by a scale factor;

a first average filter to downscale the intermediate image to the destination image, wherein the first average filter further comprises a plurality of cascaded average filters, wherein the number of the plurality of cascaded average filters is based on the scale factor.

4. (Original) The device of claim 1, further comprising: a second average filter to average vertically the intermediate image on a two-by-two pixel basis.

5. (Original) A method of downscaling a source plurality of pixels to a destination plurality of pixels, comprising:

upscaling the source plurality of pixels to an intermediate plurality of pixels, wherein the intermediate plurality of pixels has a size equal to a size of the destination plurality of pixels adjusted by a scale factor; and

downscaling the intermediate plurality of pixels to the destination plurality of pixels.

6. (Currently Amended) ~~The method of claim 5~~ A method of downscaling a source plurality of pixels to a destination plurality of pixels, comprising:

upscaling the source plurality of pixels to an intermediate plurality of pixels, wherein the intermediate plurality of pixels has a size equal to a size of the destination plurality of pixels adjusted by a scale factor;

downscaling the intermediate plurality of pixels to the destination plurality of pixels; and

wherein the scale factor is a power of two and the size of the intermediate plurality of pixels is equal to a destination height multiplied by a destination width multiplied by the scale factor.

7. (Original) The method of claim 6, wherein the scale factor is based on the destination height.

8. (Original) The method of claim 6, wherein the scale factor is based on the destination width.

9. (Original) The method of claim 6, wherein the scale factor is based on the destination height and the destination width.

10. (Original) A graphics card, comprising:

interpolation logic to upscale a source image to an intermediate image, wherein the intermediate image has a size equal to a size of a destination image adjusted by a scale factor; and

average logic to downscale the intermediate image to the destination image.

11. (Original) The graphics card of claim 10, further comprising:

a buffer comprising storage with a size of half of the destination image size plus half of a length of a preceding line in the intermediate image; and

a vertical average filter communicatively coupled to the line buffer, wherein the vertical average filter is to average vertically the intermediate image on a two-by-two pixel basis.

12. (Original) The graphics card of claim 10, wherein the average logic further averages horizontally the intermediate image on a two-by-two pixel basis.

13. (Original) The graphics card of claim 10, wherein the scale factor is based on a height of the destination image.

14. (Original) The graphics card of claim 10, wherein the scale factor is based on a width of the destination image.

15. (Original) A display device, comprising:

an interpolation filter to upscale a source plurality of pixels to an intermediate plurality of pixels, wherein the intermediate plurality of pixels has a size equal to a size of a destination plurality of pixels adjusted by a scale factor; and

a first average filter communicatively coupled to an output of the interpolation filter, wherein the first average filter is to downscale the intermediate plurality of pixels to the destination plurality of pixels.

16. (Currently Amended) ~~The display device of claim 15,~~ A display device, comprising:

an interpolation filter to upscale a source plurality of pixels to an intermediate plurality of pixels, wherein the intermediate plurality of pixels has a size equal to a size of a destination plurality of pixels adjusted by a scale factor;

a first average filter communicatively coupled to an output of the interpolation filter, wherein the first average filter is to downscale the intermediate plurality of pixels to the destination plurality of pixels; and

wherein the first average filter is to average the intermediate plurality of pixels by adding color components of adjacent pixels in a same row and performing a right shift operation on the result, for every two pixels in the intermediate plurality of pixels.

17. (Original) The display device of claim 15, wherein the scale factor is based on a destination height.

18. (Original) The display device of claim 15, wherein the scale factor is based on a destination width.

19. (Original) The display device of claim 15, wherein the average filter further averages horizontally the intermediate plurality of pixels on a two-by-two pixel basis.

20. (Original) A computer, comprising:

a processor; and

a storage device, comprising instructions, wherein the instructions when executed by the processor comprise:

upscaling a source plurality of pixels to an intermediate plurality of pixels, wherein the intermediate plurality of pixels has a size equal to a size of a destination plurality of pixels adjusted by a scale factor; and

downscaling the intermediate plurality of pixels to the destination plurality of pixels.

21. (Currently Amended) ~~The computer of claim 20,~~ A computer, comprising:

a processor; and

a storage device, comprising instructions, wherein the instructions when executed by the processor comprise:

upscaling a source plurality of pixels to an intermediate plurality of pixels, wherein the intermediate plurality of pixels has a size equal to a size of a destination plurality of pixels adjusted by a scale factor, wherein the scale factor is a power of two and the size of the intermediate plurality of pixels is equal to a destination height multiplied by a destination width multiplied by the scale factor; and

downscaling the intermediate plurality of pixels to the destination plurality of pixels.

22. (Original) The computer of claim 20, wherein the scale factor is based on a destination height.

23. (Original) The computer of claim 20, wherein the scale factor is based on a destination width.

24. (Original) The computer of claim 20, wherein the scale factor is based on a destination height and a destination width.

25. (Original) A computer, comprising:

a storage device to store a source bitmap; and

a display device comprising

an interpolation filter to upscale a source plurality of pixels to an intermediate plurality of pixels, wherein the intermediate plurality of pixels has a size equal to a size of a destination plurality of pixels adjusted by a scale factor, and

a first average filter to downscale the intermediate plurality of pixels to the destination bitmap.

26. (Currently Amended) ~~The computer of claim 25,~~ A computer, comprising:

a storage device to store a source bitmap; and

a display device comprising

an interpolation filter to upscale a source plurality of pixels to an intermediate plurality of pixels, wherein the intermediate plurality of pixels has a size equal to a size of a destination plurality of pixels adjusted by a scale factor, and

a first average filter to downscale the intermediate plurality of pixels to the destination bitmap, wherein the first average filter is to average the intermediate plurality of pixels by adding color components of adjacent pixels in a same row and performing a right shift operation on the result, for every two pixels in the intermediate plurality of pixels.

27. (Original) The computer of claim 25, wherein the scale factor is based on a destination height.

28. (Original) The computer of claim 25, wherein the scale factor is based on a destination width.

29. (Original) The computer of claim 25, wherein the first average logic further averages horizontally the intermediate plurality of pixels on a two-by-two pixel basis.

30. (Original) A program product comprising a signal-bearing media bearing instructions, wherein the instructions when read and executed by a processor comprise:

upscaling a source plurality of pixels to an intermediate plurality of pixels, wherein the intermediate plurality of pixels has a size equal to a size of a destination plurality of pixels adjusted by a scale factor; and

downscaling the intermediate plurality of pixels to the destination plurality of pixels.

31. (Original) The program product of claim 30, wherein the scale factor is based on a destination height.

32. (Original) The program product of claim 30, wherein the scale factor is based on a destination width.

33. (Original) The program product of claim 30, wherein the scale factor is based on a destination height and a destination width.

34. (Original) The program product device of claim 30, wherein the downscaling further averages the intermediate plurality of pixels on a two-by-two pixel basis.

35. (Currently Amended) A graphics card, comprising:

downscaling logic to:

perform bilinear interpolation on a plurality of samples from a source bitmap to produce an intermediate bitmap, wherein the intermediate bitmap has a size equal to a size of a destination bitmap adjusted by a scale factor, and

downscale the intermediate bitmap to produce [[a]] the destination bitmap by averaging every two adjacent values in a row of the intermediate bitmap.

36. (Canceled)

37. (Original) The graphics card of claim 35, wherein downscaling the intermediate bitmap further comprises: averaging vertically the intermediate bitmap on a two-by-two pixel basis.

38. (Original) The graphics card of claim 35, wherein the downscaling further is to average every second line of the intermediate bitmap with a corresponding pixel in a previous line.

39. (Currently Amended) The graphics card of claim [[36]] 35, wherein the scale factor is based on a size of the destination bitmap.

40. (Original) An apparatus for downscaling, comprising:

an interpolation filter to upscale a source bitmap to an intermediate bitmap; and

a first average filter to horizontally downscale the intermediate bitmap to a destination bitmap, wherein the first average filter comprises:

storage to store a pixel,

shifter logic to shift color components of the intermediate bitmap, and

adder logic to add the color components of the intermediate bitmap.

41. (Currently Amended) ~~The apparatus of claim 40, further~~ An apparatus for downscaling, comprising:

an interpolation filter to upscale a source bitmap to an intermediate bitmap;

a first average filter to horizontally downscale the intermediate bitmap to a destination bitmap, wherein the first average filter comprises:

storage to store a pixel,

shifter logic to shift color components of the intermediate bitmap, and

adder logic to add the color components of the intermediate bitmap;

a line buffer to store output from the first average filter; and

a second average filter to vertically downscale the intermediate bitmap to the destination bitmap.

42. (Original) The apparatus of claim 40, wherein the intermediate bitmap has a size equal to a size of the destination bitmap adjusted by a scale factor.

43. (Original) The apparatus of claim 41, wherein the line buffer comprises storage with a size of half of the destination bitmap plus half of a length of a preceding line in the intermediate bitmap.

44. (Original) The apparatus of claim 42, wherein the scale factor is based on a height of the destination bitmap.

45. (Original) An apparatus for downscaling, comprising:

an interpolation filter to upscale a source bitmap to an intermediate bitmap, wherein the intermediate bitmap has a size equal to a size of the destination bitmap adjusted by first and second scale factors; and

a plurality of first cascaded average filters to horizontally downscale the intermediate bitmap to a destination bitmap, wherein the first scale factor determines the number of the plurality of first cascaded average filters.

46. (Currently Amended) ~~The apparatus of claim 45,~~ An apparatus for downscaling, comprising:

an interpolation filter to upscale a source bitmap to an intermediate bitmap, wherein the intermediate bitmap has a size equal to a size of the destination bitmap adjusted by first and second scale factors;

a plurality of first cascaded average filters to horizontally downscale the intermediate bitmap to a destination bitmap, wherein the first scale factor determines the number of the plurality of first cascaded average filters; and

wherein the plurality of first average filters each comprise:

storage for storing a pixel from the intermediate bitmap,

shifter logic to shift color components of the intermediate bitmap, and

adder logic to add the color components of the intermediate bitmap.

47. (Currently Amended) ~~The apparatus of claim 45, further comprising~~ An apparatus for downscaling, comprising:

an interpolation filter to upscale a source bitmap to an intermediate bitmap, wherein the intermediate bitmap has a size equal to a size of the destination bitmap adjusted by first and second scale factors;

a plurality of first cascaded average filters to horizontally downscale the intermediate bitmap to a destination bitmap, wherein the first scale factor determines the number of the plurality of first cascaded average filters; and

a plurality of second cascaded filters to vertically downscale the intermediate bitmap to the destination bitmap, wherein the second scale factor determines the number of the plurality of second cascaded average filters.

48. (Original) The apparatus of claim 45, wherein the first and second scale factors are different.

49. (Original) A computer, comprising:

a processor;

memory coupled to the processor, wherein the memory comprises a graphics application that is to generate a source bitmap; and

a display device coupled to the processor and the memory, wherein the display device comprises:

a bilinear filter, wherein the bilinear filter is to upscale the source bitmap to an intermediate bitmap, wherein the intermediate bitmap has a size equal to a size of a destination bitmap adjusted by a scale factor,

a plurality of cascaded horizontal average filters to average horizontally the intermediate image on a two-by-two pixel basis,

a line buffer to store output from the plurality of cascaded horizontal average filters,

a plurality of cascaded vertical average filters to average vertically the intermediate image on a two-by-two pixel basis, and

a selector to deliver an output of the plurality of cascaded horizontal average filters to both the line buffer and the plurality of cascaded vertical average filters.

50. (Original) A device, comprising:

an interpolation filter, wherein the interpolation filter is to upscale a source bitmap to an intermediate bitmap, wherein the intermediate bitmap has a size equal to a size of a destination bitmap adjusted by a scale factor; and

an averaging filter to downscale the intermediate bitmap to the destination bitmap, wherein the averaging filter comprises:

storage for storing a pixel from the intermediate bitmap,

shifter logic to shift color components of the intermediate bitmap, and

adder logic to add the color components of the intermediate bitmap.

51. (Original) A computer, comprising:

a storage device to store a source bitmap; and

a graphics card comprising

an interpolation filter to upscale a source plurality of pixels to an intermediate plurality of pixels, wherein the intermediate plurality of pixels has a size equal to a size of a destination plurality of pixels adjusted by a scale factor, and

a first average filter to downscale the intermediate plurality of pixels to the destination bitmap.

52. (Original) The computer of claim 51, wherein the first average filter is to average the intermediate plurality of pixels by adding color components of adjacent pixels in a same row and performing a right shift operation on the result, for every two pixels in the intermediate plurality of pixels.

53. (Original) The computer of claim 51, wherein the scale factor is based on a destination height.

54. (Original) The computer of claim 51, wherein the scale factor is based on a destination width.

55. (Original) The computer of claim 51, wherein the first average logic further averages horizontally the intermediate plurality of pixels on a two-by-two pixel basis.

56. (New) The device of claim 3, wherein the first average filter further is to average horizontally the intermediate image on a two-by-two pixel basis.

57. (New) The device of claim 3, wherein the scale factor is two.

58. (New) The device of claim 3, wherein the scale factor is a multiple of two.

59. (New) The display device of claim 16, wherein the scale factor is based on a destination height.

60. (New) The display device of claim 16, wherein the scale factor is based on a destination width.

61. (New) The display device of claim 16, wherein the average filter further averages horizontally the intermediate plurality of pixels on a two-by-two pixel basis.

62. (New) The display device of claim 16, wherein the scale factor is a multiple of two.

63. (New) The computer of claim 21, wherein the storage device includes one selected from a group consisting of a read only memory (ROM), a random access memory (RAM), a magnetic disk storage medium, an optical storage medium, and a flash memory.

64. (New) The computer of claim 21, wherein the processor is adapted to generate a source bitmap concerning an image to be displayed.

65. (New) The computer of claim 21, wherein the processor is adapted to execute on at least one of geometry data, texture map data, and control/state data.

66. (New) The computer of claim 26, wherein the scale factor is based on a destination height.

67. (New) The computer of claim 26, wherein the scale factor is based on a destination width.

68. (New) The computer of claim 26, wherein the first average logic further averages horizontally the intermediate plurality of pixels on a two-by-two pixel basis.

69. (New) The computer of claim 26, wherein the storage device includes one selected from a group consisting of a read only memory (ROM), a random access memory (RAM), a magnetic disk storage medium, an optical storage medium, and a flash memory.

70. (New) The computer of claim 26, wherein the display device includes a visual screen.

71. (New) The apparatus of claim 41, wherein the intermediate bitmap has a size equal to a size of the destination bitmap adjusted by a scale factor.

72. (New) The apparatus of claim 41, wherein the scale factor is based on a height of the destination bitmap.

73. (New) The apparatus of claim 46, further comprising a plurality of second cascaded filters to vertically downscale the intermediate bitmap to the destination bitmap, wherein the second scale factor determines the number of the plurality of second cascaded average filters.

74. (New) The apparatus of claim 46, wherein the first and second scale factors are different.

75. (New) The apparatus of claim 74, wherein the first scale factor is a multiple of two.